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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,818	09/11/2003	Lloyd G. Jones	DR 99.05/2	5943

7590 03/23/2005  
EXXONMOBIL UPSTREAM RESEARCH COMPANY  
P. O. Box 2189  
Houston, TX 77252-2189

EXAMINER
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GAY, JENNIFER HAWKINS

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/659,818

**Applicant(s)**

JONES, LLOYD G.

**Examiner**

Jennifer H Gay

**Art Unit**

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/17/03</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

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## DETAILED ACTION

The Preliminary Amendments filed 11 September 2003 and 10 September 2004 have been entered and considered with the Office Action below.

### ***Specification***

1. The disclosure is objected to because of the following informalities: the Cross-Reference Application data should be updated to include the patent number of the parent application.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-14, 16, 17, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 5,515,915) in view of Bryant et al. (US 5,868,200).

Jones et al. discloses a well screen used in gravel packing. The screen includes a crossover (22), a perforated base pipe (25) that forms a portion of the screen (20), and a packer (50) to isolate the zone of interest from the wellbore above. A series of shunt tubes (28) are spaced around the base pipe and extend throughout the length of the pipe. The shunt tubes include inlets and a plurality of spaced outlets (33). The outer surface of the screen is made up of continuously wrapped wire (31) and can be covered with a perforated sleeve (see col. 4, lines 55-65). The shunt tubes act as spacers to separate the wire screen and the base pipe. The wire is wrapped around the shunt tubes and the base pipe such that each coil is slightly spaced from the adjacent coil to form fluid passages that gravel (32) cannot pass through. The screen may consist of a plurality of sections, approximately 30 feet long, which are connected together with blanks (see col. 5, lines 5-15).

Jones et al. discloses all of the limitations of the above claims except for the perforated sections being spaced from each other along the base pipe at a distance of 10 to 1000 feet.

Bryant et al. teaches an alternate-path well screen. The well screen is made of 20-foot lengths located on a base pipe that is slotted. The screens are spaced apart from each other along the base pipe at a certain distance (see Figure 1). (See col. 4, line 40-65)

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have spaced the perforated sections of Jones et al. along the base pipe at a given distance as taught by Bryant et al. The examiner acknowledges that Bryant et al. does not teach that the distance between the sections of screen is between 10 and 1000 feet. However, since the screens, thus the tool, are used for gravel packing and similar tools are used in fracturing, it would have been considered obvious to one of ordinary skill in the art to space each of the sections apart from adjacent sections the distance between intervals that are to be treated. In other words, if the intervals to be gravel packed or fractured are spaced between 10 and 1000 feet apart then the sections should be spaced that far apart in order to be able to effect those specific intervals.

Further, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have placed the perforated sections at 10 to 1000 foot intervals, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

4. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 5,515,915) in view of Bryant et al. (US 5,868,200) as applied to claim 9 above, and further in view of Jones (US 5,435,391).

Jones et al. and Bryant et al. disclose all of the limitations of the above claims except for passing at least one shunt tube over the wire of the screen.

Jones, as seen in Figure 1, includes shunt tubes that are located on the outside of the gravel pack screen.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have placed one of the shunt tubes of Jones et al. in view of Bryant et al. over the gravel pack screen as taught by Jones in order to have provided a means for securing the wire screen to the base pipe.

5. Claims 9-14, 16, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 5,515,915) in view of Bryant et al. (US 5,868,200) and Jones et al. (US 5,161,618).

Jones et al. discloses a well screen used in gravel packing. The screen includes a crossover (22), a perforated base pipe (25) that forms a portion of the screen (20), and a packer (50) to isolate the zone of interest from the wellbore above. A series of shunt tubes (28) are spaced around the base pipe and extend throughout the length of the pipe. The shunt tubes include inlets and a plurality of spaced outlets (33). The outer surface of the screen is made up of continuously wrapped wire (31) and can be covered with a perforated sleeve (see col. 4, lines 55-65). The shunt tubes act as spacers to separate the wire screen and the base pipe. The wire is wrapped around the shunt tubes and the base pipe such that each coil is slightly spaced from the adjacent coil to form fluid passages that gravel (32) cannot pass through. The screen may consist of a plurality of sections, approximately 30 feet long, which are connected together with blanks (see col. 5, lines 5-15).

Jones et al. discloses all of the limitations of the above claims except for the apparatus being used to fracture multiple levels in a wellbore and except for the perforated sections being spaced from each other along the base pipe at a distance of 10 to 1000 feet.

Bryant et al. teaches an alternate-path well screen. The well screen is made of 20-foot lengths located on a base pipe that is slotted. The screens are spaced apart from each other along the base pipe at a certain distance (see Figure 1). (See col. 4, line 40-65)

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have spaced the perforated sections of Jones et al. along

the base pipe at a given distance as taught by Bryant et al. The examiner acknowledges that Bryant et al. does not teach that the distance between the sections of screen is between 10 and 1000 feet. However, since the screens, thus the tool, are used for gravel packing and similar tools are used in fracturing, it would have been considered obvious to one of ordinary skill in the art to space each of the sections apart from adjacent sections the distance between intervals that are to be treated. In other words, if the intervals to be gravel packed or fractured are spaced between 10 and 1000 feet apart then the sections should be spaced that far apart in order to be able to effect those specific intervals.

Further, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have placed the perforated sections at 10 to 1000 foot intervals, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Jones et al. ('618) teaches a method and apparatus for fracturing multiple levels in a single wellbore.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used the apparatus taught by Jones et al. in view of Bryant et al. to have fractured multiple levels in one wellbore as taught by Jones et al. ('618) in order to have eliminated the need for multiple trips into the wellbore thus reducing the cost of the operation.

6. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 5,515,915) in view of Bryant et al. (US 5,868,200) and Jones et al. (US 5,161,618) as applied to claim 9 above, and further in view of Jones (US 5,435,391).

Jones et al. ('915), Bryant et al. and Jones et al. ('618) disclose all of the limitations of the above claims except for passing at least one shunt tube over the wire of the screen.

Jones, as seen in Figure 1, includes shunt tubes that are located on the outside of the gravel pack screen.

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It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have placed one of the shunt tubes of Jones et al. ('915) in view of Bryant et al. and Jones et al. ('618) over the gravel pack screen as taught by Jones in order to have provided a means for securing the wire screen to the base pipe.

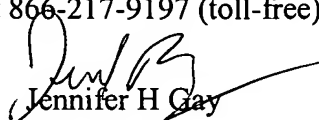
### **Conclusion**

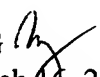
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

As applicant may be aware, the USPTO is in the process of moving to a new, consolidated campus. The examiner is currently still located at the old campus and can be reached at the above phone number. However, starting on 31 March 2005 all calls to the examiner should be made using a new telephone number, which is (571) 272-7029. Starting on that date, David Bagnell can be reached at (571) 272-6999. Please note that the official fax number will not be changing.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer H Gay  
Patent Examiner  
Art Unit 3672

JHG   
March 16, 2005